

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
7 June 2001 (07.06.2001)

PCT

(10) International Publication Number  
**WO 01/41019 A2**

(51) International Patent Classification<sup>7</sup>: **G06F 17/60**

(21) International Application Number: **PCT/US00/32725**

(22) International Filing Date: 1 December 2000 (01.12.2000)

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
09/454,425 3 December 1999 (03.12.1999) **US**

(71) Applicant: **HOMESTORE.COM, INC.** [US/US]; 30700  
Russell Ranch Road, Westlake Village, CA 91362 (US).

(72) Inventors: **GAUER, Gerry**; 3864 Foxdale Court, Thousand Oaks, CA 91320 (US). **CORNELIUS, Bruce, J.**; 1108 Westcreek Lane, West Lake Village, CA 91362 (US). **RASHID, Hassan, K.**; 2710 Conejo Canyon Court, #33, Thousand Oaks, CA 91362 (US).

(74) Agent: **GREEN, Robert, A.**; Christie, Parker & Hale, LLP, P.O. Box 7068, Pasadena, CA 91109-7068 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

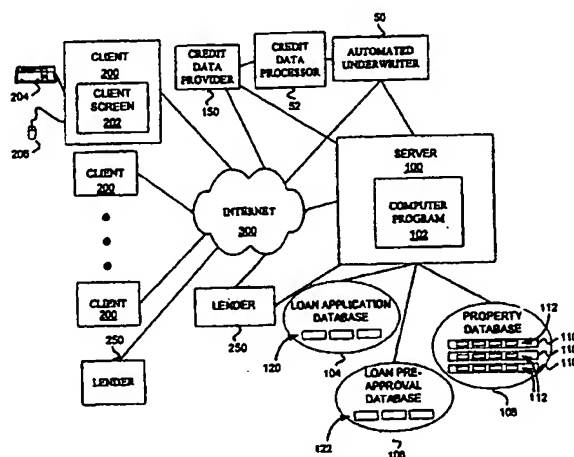
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— Without international search report and to be republished upon receipt of that report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **METHOD AND SYSTEM FOR PROCESSING A MORTGAGE APPLICATION**



(57) Abstract: A system and method for processing a mortgage application is disclosed. The system comprises a database comprising a plurality of records wherein information related to properties are stored. The records have property attributes stored therein. A computer program is adopted to provide a selection screen for selecting a property record from the database. The computer program is further adopted to present a loan application data entry screen having at least one data entry field. The computer program is further adopted to automatically enter one of the property attributes as an initial entry into one of the data entry fields. The computer program is further adopted to receive loan application data and credit data related to processing a loan from the data entry screen. The computer program is further adopted to process the loan application data, thereby creating a pre-approval status. The computer program is further adopted to forward the pre-approval status to at least one lender, who may then contact the applicant. The computer program may utilize an automated underwriting program to perform the underwriting function for loan application processing for pre-approval.

## 1 METHOD AND SYSTEM FOR PROCESSING A MORTGAGE APPLICATION

## COPYRIGHT NOTICE

5 A portion of the disclosure of this patent document contains material which is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or of the patent disclosure as it appears in the Patent and Trademark Office patent files or records, but otherwise reserves all copyright rights whatsoever.

## BACKGROUND OF THE INVENTION

10 Field of the Invention

The present invention is directed toward a system and method for processing a mortgage application. The system may be implemented on global network such as the Internet or world-wide-web.

15 Description of the Prior Art and Related Information

Systems have been implemented heretofore for on-line pre-processing of mortgage loan applications and the like. For example, ditech.com of Costa Mesa, California has a world-wide-web site on which a user can complete an online loan application. A Loan Officer will review your application. The agent will notify the applicant by phone or e-mail of pre-approval.

20 Systems described in U.S. Patent Nos. 5,930,776 and 5,611,052 disclose a lender direct credit evaluation and loan processing system. Loan application information is entered into a remote terminal. Credit bureau information is accessed by the system. Credit scoring is performed, and the loan application is approved or declined.

25 A property selection system such as that described in U.S. Patent No. 5,754,850, which is hereby incorporated by reference herein, gives users the ability to search for properties according to attributes of the properties. Such attributes may include, for example, geographic location, price range information, size, number of bedrooms/bathrooms, quality of schools, etc. Such systems are also implemented on the world-wide-web at <http://www.REALTOR.com> or <http://www.HomeBuilder.com>.

30 However, none of the systems in the prior art integrate an automated underwriting engine. Further, none of the prior art systems integrate an automated underwriting engine that complies with industry accepted or standard criteria for processing a loan application. Further, none of the prior art systems produce a loan pre-approval status as a result of the underwriting processing, which is then forwarded to one or more lenders with contact information for the applicant.  
35 Further none of the prior art systems integrate a property search engine for searching for properties for which the mortgage loan may be applied.

## 1 SUMMARY OF THE INVENTION

5 The present invention satisfies the shortcomings of mortgage loan processing systems in the prior art. The present invention is directed toward a system and method for processing a mortgage application. The system may comprise a server with one or more computer programs stored thereon. Electrically connected, or included with the server, are one or more databases. A property database comprises at least one or a plurality of property records wherein information relating to available properties are stored. Each property record has at least one attribute stored therein.

10 The server is electrically connected to a network that is electrically connected to at least one, or a plurality of client computers. Each client computer has a presentation screen for presenting data. The computer program is adopted to provide selection data to a client computer to present a selection screen on the client computer's screen for selecting a property from the property database. Each client computer may have an input means which may comprise, for example, a computer keyboard and mouse for inputting selection data for selecting the property from the property database. The selection screen presented may comprise a series of screens presented for selecting a property record based on selected values of attributes.

15 The computer program is further adopted to present a loan application data entry screen on the client computer's screen, the loan application data entry screen having loan application data entry fields for entering loan application data. The computer program is further adopted to automatically enter at least one of the property attributes as an initial entry into at least one of the data entry fields. For example, one of the loan application data entry fields may comprise an initial loan amount as one of the possible entries. The selected property record may have as one of its attributes the price of the property. The computer program may enter the price of the property as an initial loan amount, possibly subtracting 20% to account for a down payment on the property. The user has the option of using the keyboard to change the loan amount if desired to a different amount, for example to account for a 10% down payment.

20 The computer program is further adopted to process the loan application data, thereby creating a pre-approval status. In one embodiment, the server is electrically connected to an automated underwriting engine or program such as the DESKTOP UNDERWRITER system by Fannie Mae or the LOAN PROSPECTOR system by Freddie Mac. The computer program creates a loan application data record to be stored in a loan application database for semi-permanent or temporary storage. The loan application data record is forwarded to the automated underwriter program for processing.

25 Preferably, the underwriting program performs the underwriting function of the loan processing with little or no human intervention. The result of the underwriting process is a pre-approval or denial status for the user of the client computer.

A credit processing computer program is stored and executing with, or in communicative relationship with, the automated underwriting program. When the loan application data record

1 is forwarded to the automated underwriting program, the loan application data record may be immediately forwarded to the credit processing computer program which pulls credit data regarding the user of the client computer from at least one of many credit reporting agencies, or credit history data providers. The credit processing computer program populates the acquired  
5 credit data in the loan application data record for processing with the loan application data stored therein. The loan application data record is then sent to the automated underwriter program for processing.

After processing the loan application data record, the automated underwriter program 50 forwards a loan pre-approval status for the loan application data record to the computer program,  
10 which may store the loan pre-approval status in a loan pre-approval database in a loan pre-approval status record for later reference. The computer program may notify the user of the client computer in real time on the client computer's screen, by e-mail or by mail of the loan pre-approval status on behalf of the lender.

Electrically connected to the network are one or more lending institution computers or  
15 lenders which are adopted to receive the loan pre-approval status for the user of the client computer. The computer program is further adopted to forward the pre-approval status to at least one of the lenders. Alternatively, a lender may be directly electrically connected to the server so that loan pre-approval status information may be forwarded directly to the lender.

The loan pre-approval status as forwarded to the lender may be in the form of an e-mail  
20 communication which includes some or all of the loan and credit data from the loan application data record. Alternatively, the loan application data record itself may be sent to the lender if the lender has a database system for viewing the information in the loan application data record. A lending agent from the lender may then contact the user of the client computer to complete the loan process.

## 25 BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram showing a system architecture for the present invention;

Figs. 2A-2C are a series of flow diagrams illustrating a method for processing a mortgage loan application using the system of the present invention;

30 Figs. 3A-3D are a series of exemplary selection screens for presenting, and for selecting, a property record based on selected values of attributes of the property; and

Fig. 4 illustrates an exemplary loan application data entry screen for entering loan application information.

## 35 DETAILED DESCRIPTION OF THE INVENTION

With reference to Fig. 1, a system architecture for processing a mortgage application is shown. The system may comprise a server 100 with a computer program 102 stored thereon. Electrically connected, or included with the server 100 are one or more databases 104-108. A

1 property database 108 comprises at least one or a plurality of property records 110 wherein  
information relating to available properties are stored. Each property record has at least one  
attribute 112 stored therein. The structure of the property database 108 may comprise the  
structure shown in Figs. 7a-7b of U.S. Pat. No. 5,754,850.

5 The server is electrically connected to a network 300 that is electrically connected to at  
least one or a plurality of client computers 200. Each client computer has a presentation screen  
202 for presenting data. The computer program 102 is adopted to provide selection data to a  
client computer 200 to present a selection screen on the client computer's screen 202 for selecting  
a property from the property database 108. Each client computer may have an input means 204  
10 which may comprise, for example, a computer keyboard and mouse 206 for inputting selection  
data for selecting the property from the property database 108. The selection screen presented  
may comprise a series of screens presented for selecting a property record 110 based on selected  
values of attributes 112 as shown in Figs. 3A-3D, and as shown and described at the world-wide-  
web addresses <http://www.REALTOR.com> and <http://www.HomeBuilder.com>. Selection of  
15 properties may follow the steps described in U.S. Pat. No. 5,754,850 incorporated by reference  
herein.

The computer program 102 is further adopted to present a loan application data entry  
screen, as shown in Fig. 4, on the client computer's screen 202, the loan application data entry  
screen having loan application data entry fields 400 for entering loan application data. The  
20 computer program 102 is further adopted to automatically enter at least one of the property  
attributes 112 as an initial entry into at least one of the data entry fields 400. For example, one  
of the loan application data entry fields 400 may comprise an initial loan amount as one of the  
possible entries. The selected property record 110 may have as one of its attributes 112 the price  
of the property. The computer program 102 may enter the price of the property as an initial loan  
amount, possibly subtracting 20% to account for a down payment on the property. The user has  
25 the option of using the keyboard 204 to change the loan amount if desired to a different amount.

With reference back to Fig. 1, the computer program 102 is further adopted to process the  
loan application data, thereby creating a pre-approval status. In one embodiment, the server 100  
is electrically connected to an automated underwriting engine or program 50 such as the  
30 DESKTOP UNDERWRITER system by Fannie Mae or the LOAN PROSPECTOR system by  
Freddie Mac. The computer program 102 creates a loan application data record 120 to be stored  
in a loan application database 104 for semi-permanent or temporary storage. The loan  
application data record 120 is forwarded to the automated underwriter program 50 for processing.

A credit processing computer program 52 is stored and executing with, or in  
35 communicative relationship with, the automated underwriting program 50. When the loan  
application data record is forwarded to the automated underwriter 50, the loan application data  
record may be immediately forwarded to the credit processing computer program 52 which pulls  
credit data regarding the user of the client computer 200 from at least one of many credit

1 reporting agencies, or credit history data providers 150, that commonly store credit history data  
organized by social security number. The credit history data provider 150 may be either directly  
connected to the credit processing computer program 52, directly connected to the server 100,  
or connected through secure connection over the world-wide-web 300. The credit processing  
5 computer program 52 populates the acquired credit data in the loan application data record for  
processing with the loan application data stored therein. The loan application data record is then  
sent to the automated underwriter program 50 for processing.

After processing the loan application data record, the automated underwriter program 50  
forwards a loan pre-approval status for the loan application data record to the computer program  
10 50, which may store the loan pre-approval status in a loan pre-approval database 106 in a loan  
pre-approval status record 122 for later reference. The computer program 50 may notify the user  
of the client computer 200 in real time on the client computer's 200 screen, by e-mail or by mail  
of the loan pre-approval status on behalf of the lender.

Electrically connected to the network 300 are one or more lending institution computers  
15 or lenders 250 which have the ability to receive the loan pre-approval status for the user of the  
client computer 200. The computer program 102 is further adopted to forward the pre-approval  
status to at least one of the lenders 250. Alternatively, a lender 250 may be directly electrically  
connected to the server 100 so that loan pre-approval status information may be forwarded  
directly to the lender 250.

20 The loan pre-approval status as forwarded to the lender may be in the form of an e-mail  
communication which includes some or all of the loan and credit data from the loan application  
data record 120. Alternatively, the loan application data record itself may be sent to the lender  
250 if the lender 250 has a database system for viewing the information in the loan application  
data record. A lending agent from the lender 250 may then contact the user of the client  
25 computer 200 to complete the loan process.

With reference to Figs. 2A-2C, a series of flow diagrams illustrating the method for  
processing a mortgage loan application using the system of the present invention is shown. The  
method comprises allowing selection of a property record 110 from the property database 108,  
the property record comprising attributes 112 from a client computer 200, step 500. The  
30 computer program 102 receives property selection criteria from the client computer 200 resulting  
from a user entering selection commands on the keyboard 204 and mouse 206, step 502. The  
computer program 102 searches the property database 108 for property records 110 having the  
selected attributes 112. The computer causes the selected property records to be presented on the  
screen 202, step 504.

35 Some of the displayed properties are presented with a "Loan Pre-Pre-approval" button 350  
(Fig. 3D) on the screen 202, step 506. If the user of client computer 200 selects button 350, step  
508, then processing moves to step 512 (Fig. 2B). The presentation of the selected properties  
continues if button 350 is not selected, exiting the selected properties display screen if the user

1 chooses to do so, step 510.

With reference to Fig. 2B, the computer program 102 presents the loan application data entry screen on screen 202 having the plurality of fields 400, step 512. The computer program 102 may automatically enter at least one of the property attributes as an initial entry into at least one of the entry fields 400, step 514. The client computer 200 continues to receive loan application data entered using the keyboard 204 and the mouse 206, from which the computer program 102 receives the entered loan application data, step 516.

After receiving the loan application data, the computer program 102 creates the loan application data record 120 based on the received loan, step 518. The loan application data record 120 is then sent to the credit data processor program 52, step 520. The credit processor program 52 then accesses the credit history or worthiness data for the user stored at the credit history provider 150, step 522. The access may be made either over a direct link with the credit history data provider 150, or over the Internet 300. After receiving the credit history data, step 524, the credit history data processor 52 populates the loan application data record 120 with the credit history data, step 526. Next, the loan application data record is sent to the automated underwriter program 50, step 527.

With reference to Fig. 2C, the automated underwriter program 50 continues processing of the loan application data record 120, step 528. Such processing may include comparing the loan application data, which may include vital information related to the user such as employment and salary information along with the credit history data, to a matrix of minimum requirements for the size of the loan. If the automated underwriting program 50 returns a pre-approval status, step 530, then processing moves to step 534. Otherwise, processing moves to step 532 as described below.

If the loan was pre-approved, step 530, then the automated underwriter program 50, or the computer program 120, creates a loan pre-approval status record 122, step 534, and forwards a notice of pre-approval message to the user on behalf of the lender. The computer program 50 forwards the pre-approval status to one or more lenders 250, step 536. Forwarding of the pre-approval status may include forwarding an e-mail created by the computer program 50 to the lender 250, or, if the lender has the capability to read and display the loan pre-approval record 122 through database management software, then the loan pre-approval record 122 is forwarded to the lender. The lender 250 may then contact the user to complete the loan process, step 540. The computer program 50 may also send a message in real-time, e-mail or postal mail to the user

If step 530 indicates that the loan was not pre-approved, then the loan application data record is forwarded to the lender with a not pre-approved status or notice indicated, step 532. The system may notify the user on behalf of the lender of the not pre-approved status, step 542, either by e-mail, in real time on screen, or by postal service. The lender will then contact the user to discuss the not pre-approved status, step 544.

It will thus be seen that changes may be made in carrying out the above system and

1 method and in the construction set forth without departing from the spirit and scope of the  
invention, it is intended that any and all matter contained in the above description and shown in  
the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

5

10

15

20

25

30

35



## 1 WHAT IS CLAIMED IS:

1. A method for processing a mortgage loan application comprising the steps of:  
receiving loan application data related to processing a loan;  
forwarding the loan application data to an automated underwriting engine  
5 processing the loan application data with the automated underwriting engine, thereby  
creating a pre-approval status; and  
forwarding the pre-approval status to at least one lender.
2. The method of claim 1, wherein the step of receiving comprises receiving the loan  
application data from a data entry screen.
- 10 3. The method of claim 1, wherein the step of forwarding the loan application data to the  
automated underwriting engine comprises forwarding the loan application data to a remotely  
located automated underwriting engine through a network.
4. The method of claim 1, wherein the step of forwarding the loan application data to the  
automated underwriting engine comprises forwarding the loan application data to a remotely  
15 located automated underwriting engine through a dedicated communications medium.
5. The method of claim 1, wherein the step of forwarding the loan application data to the  
automated underwriting engine comprises forwarding the loan application data to a remotely  
located automated underwriting engine through a non-dedicated communications medium.
6. The method of claim 1, further comprising receiving credit history data for processing with  
20 the received loan application data.
7. A method for processing a mortgage loan application comprising the steps of:  
selecting a property from a database, the property having a first property attribute;  
presenting a loan application data entry screen having a first data entry field;  
automatically entering the first property attribute as an initial entry into the first data entry  
25 field;  
receiving loan application data related to processing a loan from the loan application data  
entry screen;  
processing the loan application data, thereby creating a pre-approval status; and  
forwarding the pre-approval status to at least one lender.
- 30 8. The method of claim 7, wherein the step of selecting a property comprises selecting a  
property based on a plurality of property attributes, the first property attribute comprising one of  
the plurality of property attributes.
9. The method of claim 7, wherein the step of presenting a loan application data entry screen  
comprises presenting a loan application data entry screen having a plurality of data entry fields,  
35 the first data entry field comprising one of the plurality of data entry fields.
10. The method of claim 9, wherein the loan application data comprises entries into the  
plurality of data entry fields.
11. The method of claim 10, further comprising receiving credit history data for processing

1 with the loan application data.

12. The method of claim 11, wherein the step of receiving comprises creating a loan application data record based on the loan application data and the credit history data.

5 13. The method of claim 12, wherein the step of processing comprises sending the loan application data record to an automated underwriting engine for processing the loan application data and credit history data in the loan application data record.

14. The method of claim 7, further comprising providing a selection means for selecting an option for presenting the loan application data entry screen after the step of selecting a property from a database.

10 15. The method of claim 7, comprising allowing the entry into the first data entry field to be changed.

16. A system for processing a loan application comprising:

a database;

a property record in the database wherein information related to a property is stored;

15 the property record having a first property attribute stored therein;

a computer program adopted to provide a selection screen for selecting the property record from the database;

the computer program further adopted to present a loan application data entry screen having a first data entry field;

20 the computer program further adopted to automatically enter the first property attribute as an initial entry into the first data entry field;

the computer program further adopted to receive loan application data related to processing a loan application from the data entry screen;

25 the computer program further adopted to process the loan application data, thereby creating a pre-approval status; and

the computer program further adopted to forward the pre-approval status to at least one lender.

17. The system of claim 16, wherein the database and the computer program are stored on a server.

30 18. The system of claim 17, wherein the server is electrically connected to a network which is electrically connected to a client computer.

19. The system of claim 18, wherein the computer program is further adopted to present the selection screen on the client computer.

20. The system of claim 19, wherein the computer program is further adopted to present the loan application data entry screen on the client computer.

35 21. The system of claim 20, wherein the record comprises a plurality of property attributes for the property, the first attribute comprising one of the plurality of property attributes.

22. The system of claim 21 wherein the loan application data entry screen comprises a

i plurality of data entry fields. the first data entry field comprising one of the plurality of data entry fields.

23. The system of claim 22, the first property attribute comprising an asking price of the property.

5 24. The system of claim 23, the first data entry field comprising a requested loan amount to be processed with the loan application data.

25. The method of claim 16, wherein the computer program is further adopted to receive credit history data for processing with the received loan application data.

10

15

20

25

30

35

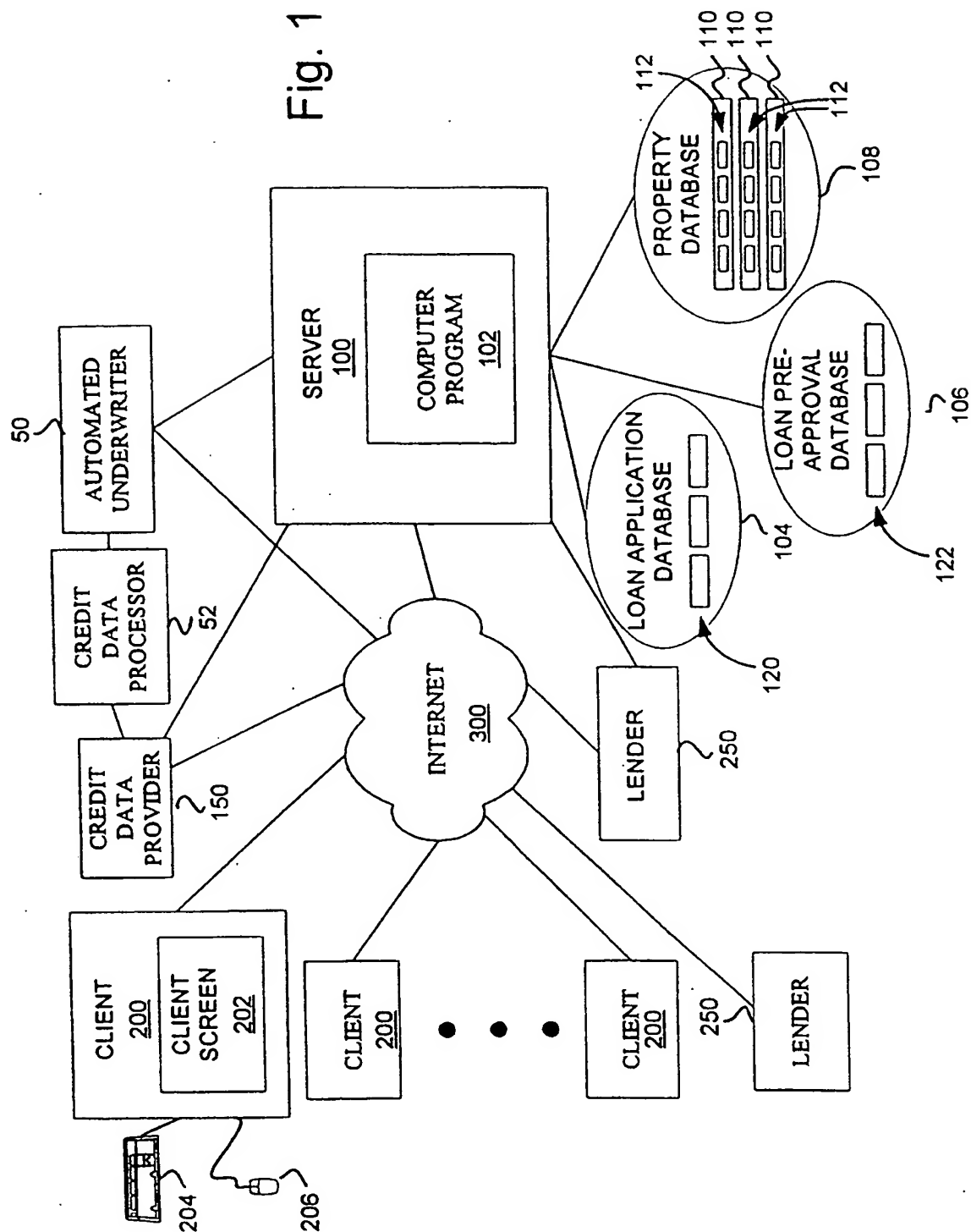


Fig. 2A

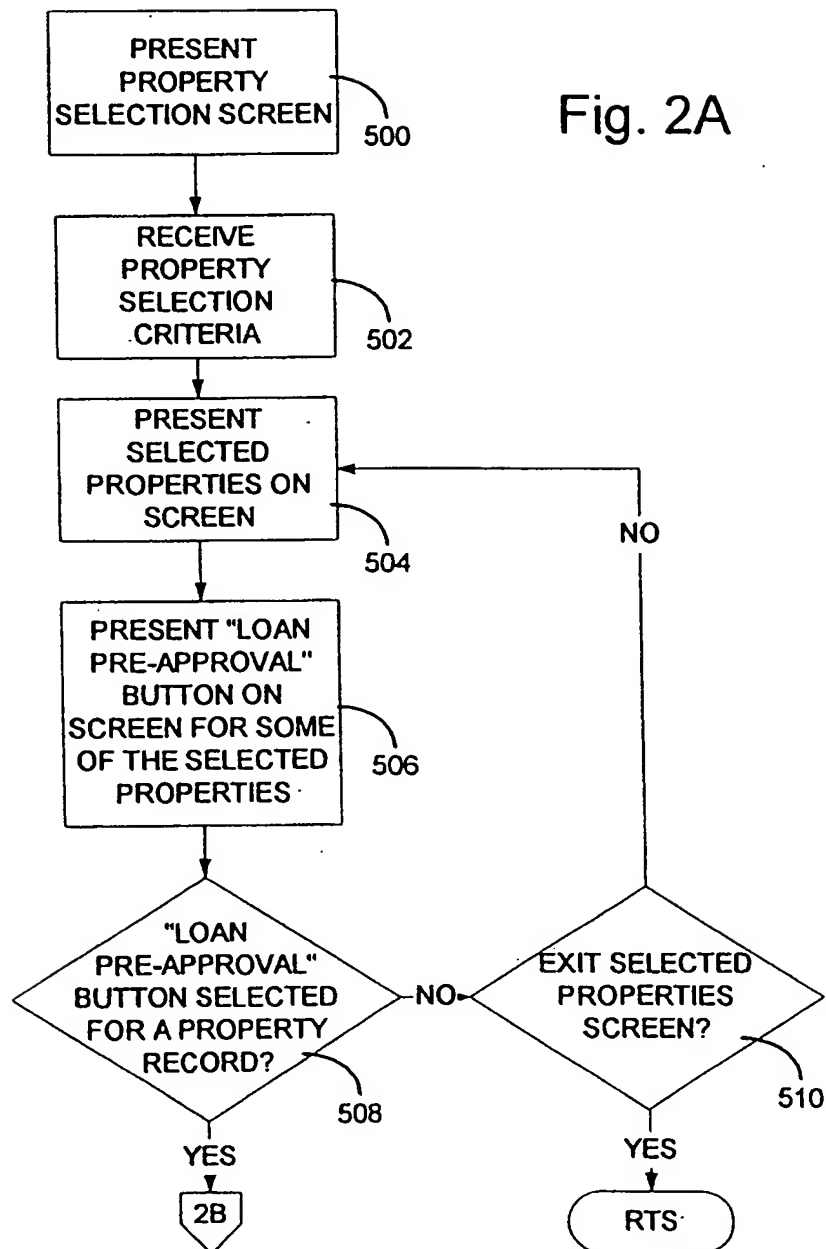


Fig. 2B

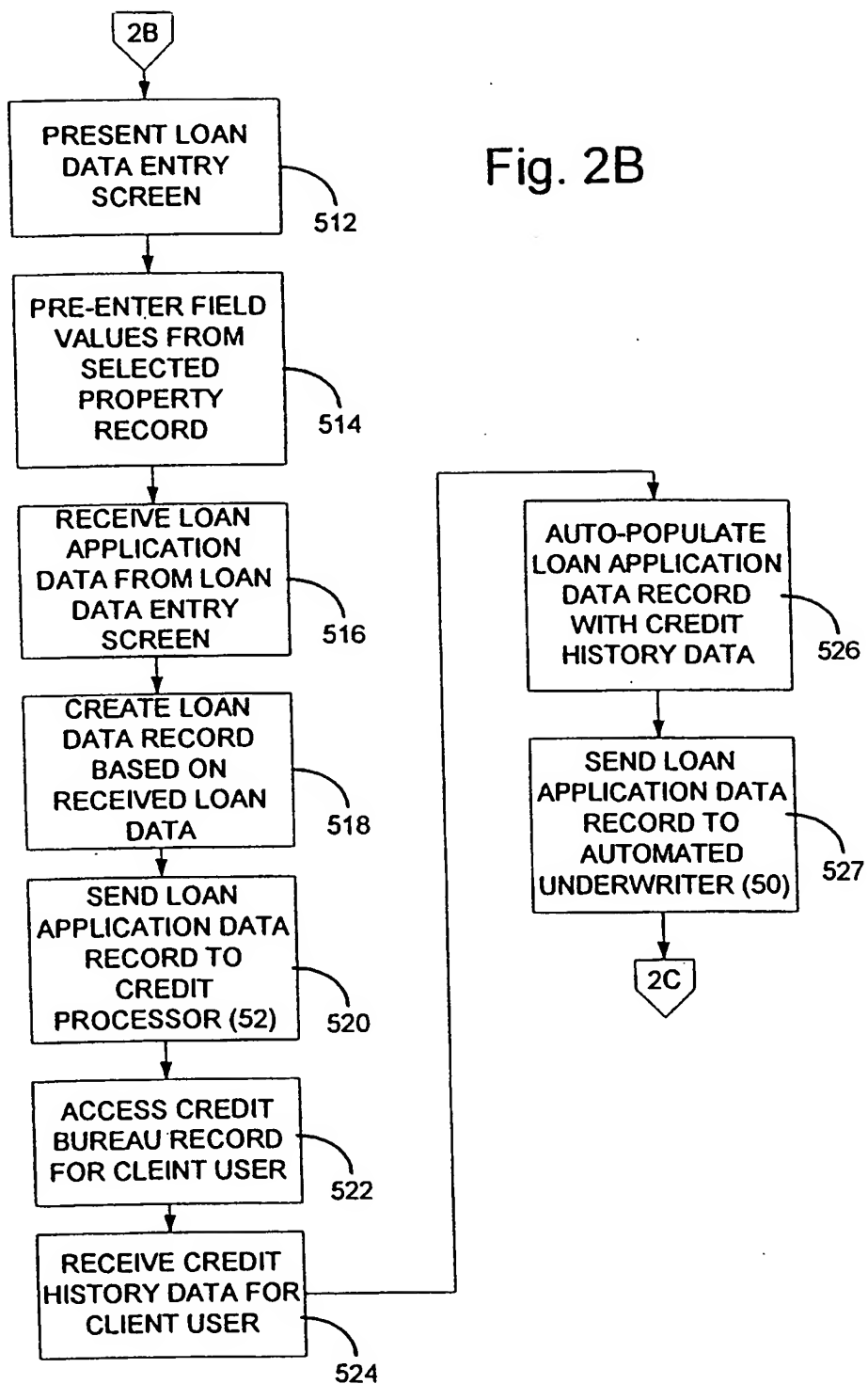
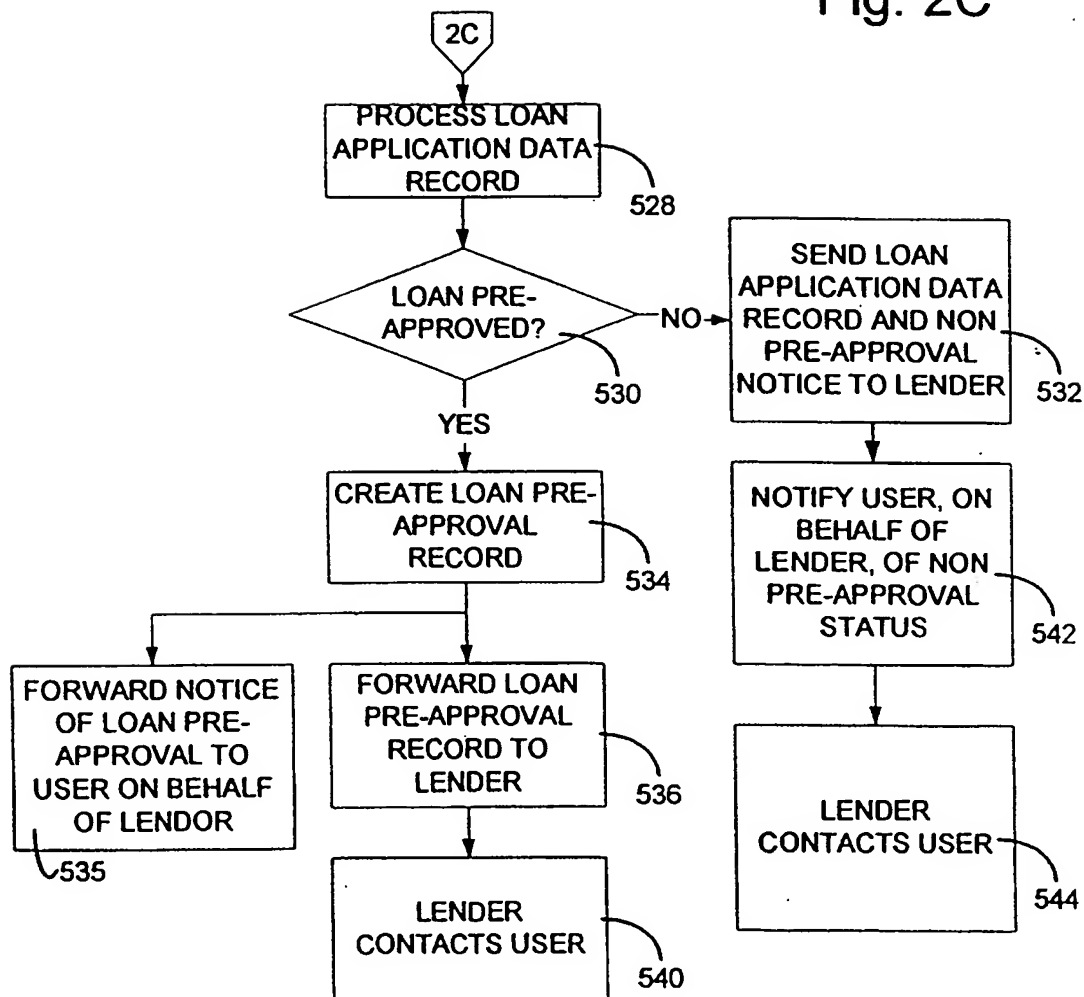


Fig. 2C



**Fig. 3A**

**REALTOR.COM: Find a Home - Start Your Search - Netscape**

<http://www.realtor.com/FindHome/USMptHome.asp?gate=homestate>

**Internet Marketing**  
Enhance Your Listing  
On **RealtorPlace®**

Type in the city and state and choose a radius.

City:

State/Province:

Search within a  -mile radius.

**Continue**

**Zip/Postal Code**

Search within the following Zip or Postal Code:

**Continue**

**MLS Information**

Go directly to a listing by typing in the city, state, and MLS Number of the listing. All three fields are required.

City:

State/Province:

MLS ID#:

**Continue**

**REALTOR® is a registered trademark that identifies a member of the NATIONAL ASSOCIATION OF REALTORS® and/or their suppliers, 1995-99. All rights reserved. More Information.**

**Terms of Use and Privacy Policy**



Fig. 3B

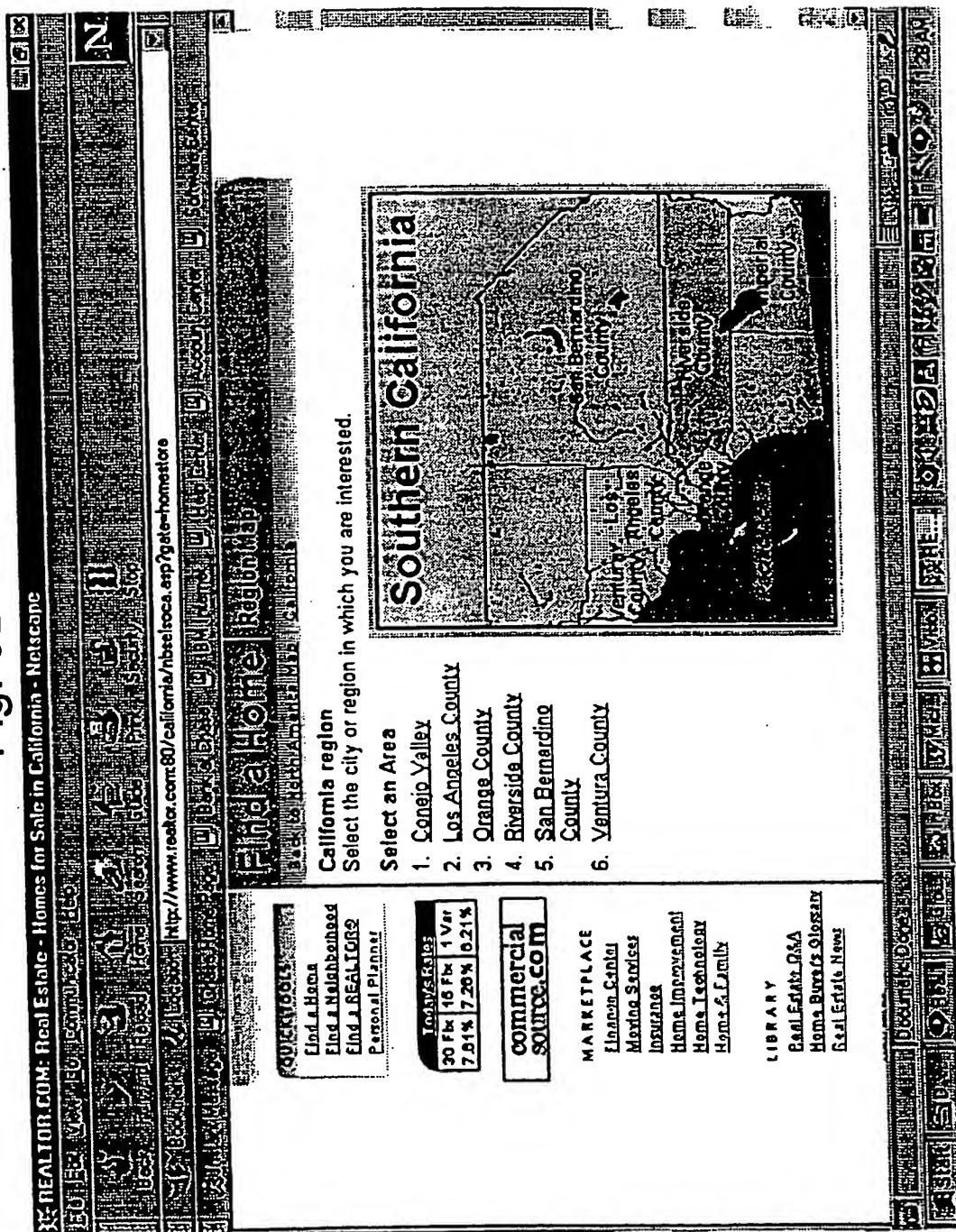


Fig. 3C

REALTOR.COM: Homes for Sale in Western LA. Search Criteria - Netscape

Find a Home  
Find a Neighborhood  
Find a REALTOR®  
Personal Planner

Today's Rates  
30 Fx 4.6 Fx 1 Var  
7.01% 7.20% 0.21%

commercial  
source.com

MARKETPLACE  
Elmeron Center  
Mexico Services  
Insurance  
Home Improvement  
Home Technology  
Home & Family

LIBRARY  
Real Estate Q&A  
Home Buying Glossary  
Real Estate News

UTILITIES  
Site Search  
Help/FAQ  
Site Map

We have  
82 Listings  
in this area

See them all!  
Narrow the list

GENERAL SEARCH CRITERIA

Type of Home:  
☒ Single Family Home  
☐ Townhome or Condo

Approximate Price Range:  
 \$0 to no maximum

Minimum Number of Bedrooms:  
 any

Minimum Number of Baths:  
 any

Minimum Square Footage of Home:  
 any

Display Homes in Groups of:  
 3  
 (If you have a fast connection, you can display more at a time.)

OTHER PREFERENCES

Homes with these features will be presented first.

Interior Features  
☐ Fireplaces

Site Map



Fig. 4

